

Applicants: Dube et al.
For: Adjustable Steering System

1 1. A triple clamp adapted for use with a vehicle having a steering stem, one or more
2 fork members, and one or more handlebars, comprising,
3 a frame member having a perimeter that comprises a front edge and a back edge and
4 having a centerline between said front edge and said back edge, comprising,
5 one or more fork member bores adapted to receive said fork member,
6 one or more steering stem bores adapted to receive said steering stem;
7 one or more handlebar support members adapted to support said handlebar; and
8 one or more means to selectively maintain said handlebar support member in one or more
9 selectable positions;
10 wherein, said frame member has one or more frame engaging parts that are adapted to
11 engage, at said selectable positions, one or more handlebar support engaging parts provided on
12 said handlebar support member, and wherein at least two of said selectable positions are between
13 said front edge and said centerline, and at least two of said selectable positions are between said
14 back edge and said centerline.

1 2. The triple clamp of claim 1, wherein at least one of said means to selectively
2 maintain said handlebar support member comprises,
3 two or more bolts that are each adapted to pass through bolt bores provided in said
4 handlebar support member and said frame member.

1 3. The triple clamp of claim 2, wherein said frame member has an underside with an
2 outer surface and further comprises a recess in said underside into which at least a portion of said

bolts is adapted to protrude from said bolt bores and to engage one or more corresponding stabilizing members having an outer surface that is flush with or within said recess below said outer surface of said frame member.

4. The triple clamp of claim 3, wherein said bolts have threads and wherein said stabilizing member comprises two or more threaded bores corresponding to threads on said bolts.

5. The triple clamp of claim 1, wherein said handlebar support members have a perimeter which remains within said perimeter of said frame member when said handlebar support members are positioned at any one or more of said selectable positions.

6. The triple clamp of claim 1, further comprises one or more position indicators.

7. A triple clamp adapted for use with a vehicle having a steering stem, one or more fork members, and one or more handlebars, comprising,

a frame member, comprising,

one or more fork member bores adapted to receive fork member,

one or more steering stem bores adapted to receive said steering stem;

one or more handlebar support members adapted to support said handlebar; and

one or more means, to selectively maintain said handlebar support member in one or more of said selectable positions, comprising, two or more bolts each adapted to pass through bolt bores provided in said handlebar support member and said frame member;

wherein, said frame member has one or more frame engaging parts adapted to engage, at selectable positions, one or more handlebar support engaging parts provided on said handlebar support member.

1 8. The triple clamp of claim 7, wherein said frame member has an underside with an
2 outer surface and further comprises a recess in said underside into which at least a portion of said
3 bolts are adapted to protrude from said bolt bores and to engage one or more corresponding
4 stabilizing members having an outer surface that is flush with or within said recess below said
5 outer surface of said frame member.

1 9. The triple clamp of claim 7, further comprising one or more position indicators.

1 10. A triple clamp adapted for use with a vehicle having a steering stem, steering stem
2 angle, and one or more fork members, comprising,
3 a frame member comprising,
4 one or more fork member bores adapted to receive said fork member,
5 one or more steering stem bores adapted to receive said steering stem; and
6 one or more means to selectively change said angle of said steering stem.

1 11. The triple clamp of claim 10, wherein one or more of said means to selectively
2 change said angle of said steering stem comprises, a steering angle member, having an offset
3 bore through said inset member adapted to receive said steering stem, that is adapted to be
4 removably fixed in said steering stem bore.

1 12. The triple clamp of claim 11, wherein said steering angle member is adapted to
2 provide two or more selectable steering stem angles.

1 13. The triple clamp of claim 11, wherein said steering angle member is adapted to be
2 removably inset in said steering stem.

1 14. The triple clamp of claim 11, wherein said frame member has an outer surface and
2 wherein said steering angle member has an outer surface that, while the steering angle member is

inset in said steering stem bore, is flush with or within said steering stem bore below said outer surface of said frame member.

15. The triple clamp of claim 11, wherein said vehicle further comprises one or more handlebars, further comprising,
one or more handlebar support members adapted to support said handlebar; and
one or more means to selectively maintain said handlebar support member in one or more selectable positions.

16. The triple clamp of claim 15, wherein one or more of said means to selectively maintain said handlebar support member comprises; one or more frame engaging parts that are adapted to engage, at said selectable positions, one or more handlebar support engaging parts provided on said handlebar support member.

17. An adjustable steering system adapted for use with a vehicle having a steering stem, a steering stem angle, one or more fork members, and one or more handlebars, comprising,
an upper triple clamp comprising,
a first frame member comprising,
one or more fork member bores adapted to receive said fork member,
one or more steering stem bores adapted to receive said steering stem;
one or more handlebar support members adapted to support said handlebar; and
one or more means to selectively maintain said handlebar support member in one or more selectable positions,
wherein, said frame member has one or more frame engaging parts that are adapted to engage, at said selectable positions, one or more handlebar support

engaging parts provided on said handlebar support member; and
a lower triple clamp comprising,
a second frame member comprising,
one or more fork member bores adapted to receive said fork member,
one or more steering stem bores adapted to receive said steering stem;
one or more means to selectively change said angle of said steering stem.

18. The adjustable steering system of claim 17, wherein one or more of said means to selectively change said angle of said steering stem comprises, a steering angle member, having an offset bore through said steering angle member adapted to receive said steering stem, that is adapted to be removably fixed in said steering stem bore of said second frame member.

19. The adjustable steering system of claim 17, wherein said frame member has a front edge, a back edge and a centerline between said front edge and said back edge, and wherein at least two of said selectable positions are between said front edge and said centerline, and at least two of said selectable positions are between said back edge and said centerline.

20. The adjustable steering system of claim 17, wherein said first frame member of said upper triple clamp further comprises one or more means to selectively change said angle of said steering stem.

21. The adjustable steering system of claim 20, wherein one or more of said means, of said first frame member, to selectively change said angle of said steering stem comprises, a steering angle member, having an offset bore through said steering angle member adapted to receive said steering stem, that is adapted to be removably fixed in said steering stem bore of said second frame member.

1 22. The adjustable steering system of claim 17, wherein at least one of said means to
2 selectively maintain said handlebar support member comprises two or more bolts that are each
3 adapted to pass through bolt bores provided in said handlebar support member and said frame
4 member; and wherein said frame member has an underside with an outer surface and further
5 comprises a recess in said underside into which at least a portion of said bolts is adapted to
6 protrude from said bolt bores and to engage one or more corresponding stabilizing members
7 having an outer surface that is flush with or within said recess below said outer surface of said
8 frame member.

1 23. An adjustable steering system adapted for use with a vehicle having a steering
2 stem, a steering stem angle, one or more fork members, and one or more handlebars, comprising,
3 an upper triple clamp comprising,
4 a first frame member comprising,
5 one or more first fork member bores adapted to receive said fork member,
6 one or more first steering stem bores adapted to receive said steering stem;
7 one or more handlebar support members adapted to support said handlebar; and
8 one or more means to selectively maintain said handlebar support member in one
9 or more selectable positions,
10 wherein, said frame member has one or more frame engaging parts that are
11 adapted to engage, at said selectable positions, one or more handlebar support
12 engaging parts provided on said handlebar support member; and
13 one or more first means to selectively change said angle of said steering stem; and
14 a lower triple clamp comprising,

15 a second frame member comprising,
16 one or more second fork member bores adapted to receive said fork
17 member,
18 one or more second steering stem bores adapted to receive said steering
19 stem;
20 one or more second means to selectively change said angle of said steering stem.

1 24. The adjustable steering system of claim 23, wherein one or more of said first
2 means or said second means, to selectively change said angle of said steering stem, comprises, a
3 steering angle member, having an offset bore through said steering angle member that is adapted
4 to receive said steering stem, that is adapted to be removably fixed in said first or second steering
5 stem bore, respectively.

1 25. An adjustable steering system adapted for use with a vehicle having a steering
2 stem, a steering stem angle, one or more fork members, and one or more handlebars, comprising,
3 an upper triple clamp comprising,
4 a first frame member comprising,
5 one or more first fork member bores adapted to receive said fork member,
6 one or more first steering stem bores adapted to receive said steering stem;
7 one or more handlebar support members adapted to support said handlebar; and
8 one or more means to selectively maintain said handlebar support member in one
9 or more selectable positions,
10 wherein, said frame member has one or more frame engaging parts that are
11 adapted to engage, at said selectable positions, one or more handlebar support

engaging parts provided on said handlebar support member; and
one or more first means to selectively change said angle of said steering stem; and
a lower triple clamp comprising,
a second frame member comprising,
one or more second fork member bores adapted to receive said fork
member,
one or more second steering stem bores adapted to receive said steering
stem;
one or more second means to selectively change said angle of said steering stem.

26. A triple clamp that is adapted for use with a vehicle having a steering stem, one or
more fork members, and one or more handlebars set at a height, comprising,
a frame member comprising,
one or more fork member bores adapted to receive said fork member,
one or more steering stem bores adapted to receive said steering stem;
one or more handlebar support members adapted to support said
handlebar; and
one or more means to selectively maintain said handlebar support member
in one or more selectable positions;
wherein said handlebar support member comprises one or more modular stack
members that are adapted to selectively vary said height of said handlebar.

27. An adjustable steering system that is adapted for use with a vehicle having a
steering stem, a steering stem angle, one or more fork members, and one or more handlebars,

3 comprising,
4 an upper triple clamp comprising,
5 a first frame member comprising,
6 one or more first fork member bores adapted to receive said fork
7 member,
8 one or more first steering stem bores adapted to receive said
9 steering stem;
10 one or more handlebar support members adapted to support said
11 handlebar; and
12 one or more means to selectively maintain said handlebar support
13 member in one or more selectable positions,
14 wherein, said first frame member has one or more frame engaging
15 parts that are adapted to engage, at said selectable positions, one or more handlebar support
16 engaging parts provided on said handlebar support member; and
17 one or more first means to selectively change said angle of said
18 steering stem; and
19 a lower triple clamp comprising,
20 a second frame member comprising,
21 one or more second fork member bores adapted to receive said fork
22 member,
23 one or more second steering stem bores adapted to receive said
24 steering stem; and

25 one or more means to selectively change said angle of said steering
26 stem; and

27 wherein said handlebar support member comprises one or more
28 modular stack members that are adapted to selectively vary said height of said handlebar.

1 28. A steering angle device, adapted for use with a triple clamp of a vehicle having a
2 steering stem and a steering stem angle, wherein said triple clamp has one or more steering stem
3 bores adapted to receive said steering stem at an angle relative to said triple clamp and one or
4 more steering angle apertures; said steering angle device comprising,
5 a steering angle frame having a perimeter with two perimeter points located on said
6 perimeter opposite from one another, and a frame centerpoint that is equidistant from said two
7 opposite perimeter points, wherein said steering angle frame has a bore, that is adapted to receive
8 said steering stem through said bore, wherein said bore has a bore centerpoint that is offset from
9 said frame centerpoint, and wherein at least a portion of said steering angle frame is adapted to be
10 removably fixed in said steering angle aperture.